

By comparing groups A and B, the results obtained are the following:

N^G, N^G -dimethylarginine applied topically once per day for 4 days before the application of the product having an irritant character (2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthyl)-6-benzo[b]thiophenecarboxylic acid) reduces by 24% the amplitude and by 50% the area under the curve of the response induced by the product having an irritant character (the curve corresponding to the thickness of the ear as a function of the days for the reading).

EXAMPLE 3

The aim of this example is to demonstrate the topical anti-irritant activity in vivo of N^G -monomethyl-L-arginine (L-NMMA) used for curative purposes.

The test used to evaluate this activity is the same as that used in Example 1.

The exact operating procedure is the following: 10 mice are first treated with the active product having an irritant character by topically applying to one of their ears at time $t=0$ with 20 μ l of an acetone solution containing 0.01% by weight of 2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthyl)-6-benzo[b]thiophenecarboxylic acid. A gel comprising 1% by weight of L-NMMA is topically applied to 5 (=group 2) of the 10 mice thus treated 6 hours after the application of the product having an irritant character, once per day for 5 days. The 5 mice which were not treated with L-NMMA constitute group 1. The oedematous response is quantified by measurement of the thickness of the ear. The results are then expressed as % increase in the thickness of the mouse ear compared to the increase in thickness observed on the other ear which, for its part, was treated (under the same conditions as above) with only an acetone solution without active agent (control or reference ear).

The results obtained are as follows:

After 5 days of treatment, the increase in the thickness of the mouse ear is at its maximum (100%) for group 1 and is 72% for group 2.

The results clearly demonstrate a 28% inhibition of the ear oedema for the mice treated with this NO-synthase inhibitor.

L-NMMA reduces by 51% the area under the curve of the response induced by the product having an irritant character (the curve corresponding to the thickness of the ear as a function of the days for the reading).

If the same treatment is carried out by applying, in place of L-NMMA, 1% or 5% betaine or 1% N^G, N^G -dimethyl-L-arginine (symmetric dimethyl-L-arginine, called SDMA), a 9, 16 and 7% inhibition of the oedema of the ear is observed, respectively, for the mice treated with these products which are not NO-synthase inhibitors (see especially for SDMA: The Lancet, Vol. 339: 572-575). A 24, 13 and 27% reduction in the area under the curve of the response induced by the product having an irritant character is also observed respectively (the curve corresponding to the thickness of the ear as a function of the days for the reading).

EXAMPLE 4

Compositions in accordance with the invention, provided in the form of a lotion, a gel and a cream for topical use, are illustrated here.

	% by weight
5 LOTION	
Disodium EDTA	0.1
Poloxamer 182	0.2
Water	qs 100
Ethoxydiglycol	5
10 N^G, N^G -dimethylarginine	1
GEL	
Disodium EDTA	0.1
Poloxamer 182	0.2
Water	qs 100
15 Sepigel 305 sold by Seppic	3
Ethoxydiglycol	5
N^G, N^G -dimethylarginine	1
CREAM	
Disodium EDTA	0.1
Poloxamer 182	0.2
20 Water	qs 100
Preservatives	0.3
Sepigel 305 sold by Seppic	3
Apricot kernel oil	10
Cyclomethicone	5
Ethoxydiglycol	5
25 Methyl ester of N^G -nitro-L-arginine	1
CREAM oil-in-water emulsion	
N^G -monomethyl-L-arginine (NMMA)	10^{-2}
Glycerol stearate	2.00
Polysorbate 60 (Tween 60 sold by the company ICI)	1.00
30 Stearic acid	1.40
Triethanolamine	0.70
Carbomer	0.40
Liquid fraction of shea butter	12.00
Perhydrosqualene	12.00
Antioxidant	0.05
35 Perfume	0.50
Preservative	0.30
Water	qs 100
LOTION	
Adapalène TM	0.010 g
40 N^G -monomethyl-L-arginine (NMMA)	0.100 g
Polyethyleneglycol (PEG 400)	69.890 g
Ethanol 95%	30.000 g

What is claimed is:

1. A cosmetic or pharmaceutical composition, said composition comprising,
 - a) in a cosmetically or pharmaceutically acceptable medium, at least one cosmetic
 - b) or pharmaceutical product capable of causing a cutaneous irritant effect, and at least one topically applied nitric oxide synthase inhibitor,
 - wherein said at least one topically applied nitric oxide synthase inhibitor is present in an amount effective to reduce the cutaneous irritant effect of said at least one cosmetic or pharmaceutical product.
2. A composition according to claim 1, wherein said pharmaceutical composition is a dermatological composition.
3. A composition according to claim 1, wherein said at least one nitric oxide synthase inhibitor is present in a concentration ranging from $10^{-6}\%$ to 10% by weight relative to the total weight of the composition.
4. A composition according to claim 3, wherein said at least one nitric oxide synthase inhibitor is present in a concentration ranging from $10^{-4}\%$ to 1% by weight relative to the total weight of the composition.